

Recorded water levels in this bulletin are derived from a representative network of water level gages on each lake (see cover [map](#)). Providers of these data are the National Ocean Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, and the Marine Environmental Data Service, Department of Fisheries and Oceans, Canada. The Detroit District, Corps of Engineers and Environment Canada derive historic and projected lake levels under the auspices of the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data.

This bulletin is produced monthly as a public service. Tables of possible storm-induced rises at key locations on the Great Lakes are available on request. The Corps also publishes the "Great Lakes, Connecting Channels and St. Lawrence River Water Levels and Depths," weekly, which provides a forecast of depths in the connecting rivers between the Great Lakes and the International Section of the St. Lawrence River. These publications can be obtained free of charge by writing to the address shown on the front cover, or by calling (313) 226-6441. Notices of change of address should include the name of the publication(s). The Internet address <http://www.lre.usace.army.mil/glhh> also contains this information.

## Great Lakes Basin Hydrology February 2011

Overall, the Great Lakes basin experienced near average precipitation during the month of February. Precipitation falling on individual basins varied greatly, with the Lake Superior basin receiving only 60% of the average precipitation while the Lake Erie basin received 192% of average over the last month. Over the past 12 months, precipitation has been below average for Lakes Superior and Michigan-Huron, above average for Lake Erie, and near average for Lake Ontario. Outflows from Lakes Superior, Michigan-Huron, and Erie were all below average in February while the outflow from Lake Ontario was near average. The tables below list February precipitation, water supply, and outflow information for the entire Great Lakes basin.

Comparison of February monthly mean water levels to long-term (1918-2010) average shows Lakes Superior, Michigan-Huron, St. Clair, Erie and Ontario were 13, 20, 11, 9 and 7 inches below average, respectively.

| PRECIPITATION (INCHES) |          |                        |       |                 |                              |                        |       |                 |
|------------------------|----------|------------------------|-------|-----------------|------------------------------|------------------------|-------|-----------------|
| BASIN                  | February |                        |       |                 | 12-Month Comparison          |                        |       |                 |
|                        | 2011     | Average<br>(1900-2008) | Diff. | % of<br>Average | Average<br>Last 12<br>months | Average<br>(1900-2008) | Diff. | % of<br>Average |
| Superior               | 0.87     | 1.45                   | -0.58 | 60              | 28.73                        | 30.51                  | -1.78 | 94              |
| Michigan-Huron         | 1.56     | 1.74                   | -0.18 | 90              | 30.59                        | 32.44                  | -1.85 | 94              |
| Erie                   | 4.02     | 2.09                   | 1.93  | 192             | 37.46                        | 35.40                  | 2.06  | 106             |
| Ontario                | 2.53     | 2.37                   | 0.16  | 107             | 35.67                        | 35.71                  | -0.04 | 100             |
| Great Lakes            | 1.82     | 1.78                   | 0.04  | 102             | 31.21                        | 32.64                  | -1.43 | 96              |

| Lake           | February WATER SUPPLIES <sup>1</sup> (cfs) |                                     | February OUTFLOW <sup>2</sup> (cfs) |                                     |
|----------------|--|-------------------------------------|-------------------------------------|-------------------------------------|
|                | 2011                                       | Average <sup>4</sup><br>(1900-2008) | 2011                                | Average <sup>3</sup><br>(1900-2008) |
| Superior       | -26,000                                    | 9,000                               | 55,000                              | 67,000                              |
| Michigan-Huron | 51,000                                     | 88,000                              | 134,000                             | 157,000                             |
| Erie           | 39,000                                     | 38,000                              | 174,000                             | 192,000                             |
| Ontario        | 34,000                                     | 37,000                              | 228,000                             | 227,000                             |

Notes: Values (excluding averages) are based on preliminary computations. CFS denotes cubic feet per second.

<sup>1</sup> Negative water supply denotes evaporation from lake exceeded runoff from local basin.

<sup>2</sup> Does not include diversions.

<sup>3</sup> St Lawrence River average outflow is based on period of record 1900-2005

<sup>4</sup> Lake Ontario average water supply based on 1900-1989